

Appendix A: Technical Notes

Data Sources:

Behavioral Risk Factor Surveillance System (BRFSS): This is a national telephone survey of adults ages 18 and older that monitors modifiable risk factors for chronic diseases and other leading causes of death. For the Washington State BRFSS website, please go to http://www.doh.wa.gov/EHSPHL/CHS/CHS-Data/brfss/brfss_homepage.htm. For CDC BRFSS information, please go to CDCs Behavioral Risk Factor Surveillance System web site (or <http://www.cdc.gov/brfss/>).

Birth Certificates: For more information about what data are collected on the Washington State Birth Certificates, please go to Washington State Department of Health - Birth Certificates web site (or http://www.doh.wa.gov/EHSPHL/CHS/CHS-Data/birth/bir_main.htm).

Census: Current Washington State census data are available from the Washington State Office of Financial Management at the OFM Population, Economy and Research (or <http://www.ofm.wa.gov/sps/index.htm>) web site and U.S. Census Bureau at Census Bureau Home Page (or <http://www.census.gov/>).

Child Death Review (CDR): Washington's Child Death Review data come from reviews submitted to a state database by local CDR teams operating across the state. Child Death Review is a process by which local communities establish a multi-disciplinary team representing public health, medical providers, law enforcement, school counselors and other agencies and professions. Each team identifies circumstances leading to such deaths; collect and report accurate, uniform information; improve interagency communication; and develop strategies to improve child health and safety. From 1998 through June 2003, 29 community-based CDR teams covered the entire state of Washington through contracts with 34 local health jurisdictions. Each contractor convened a multidisciplinary team (5-20 members) that reviewed unexpected deaths of children age birth to 18 years residing in that jurisdiction using a standardized data collection tool and submitted these reviews to the Washington State Department of Health. (See: <http://www.doh.wa.gov/cfh/mch/cahpc/cdr.htm>)

CSHCN Survey: This survey explores the extent to which children with special health care needs (CSHCN) have medical homes, adequate health insurance, and access to needed services. Other topics include care coordination and satisfaction with care. It is administered by the National Center for Health Statistics as a module within the **State and Local Area Integrated Telephone Survey** (*SLAITS survey methodology. For more information visit the SLAITS website at NCHS - SLAITS home page* (or <http://www.cdc.gov/nchs/slaits.htm>).

Current Population Survey (CPS): This is a monthly sample household survey of the non-institutional civilian population in the United States. Most of the information collected is on unemployment and the labor force, though also is used for supplemental studies such as tobacco use and marital and birth history. For the CPS Website, please go to *Current Population Reports* (or <http://www.census.gov/main/www/cprs.html>).

Appendix A: Technical Notes

Death Certificates: For more information about what data are collected on the Washington State Death Certificates, please visit the *Washington State Department of Health - Death Certificates* web page (or <http://www.doh.wa.gov/EHSPHL/CHS/CHS-Data/death/deatmain.htm>). For more information of the International Classification of Disease (ICD) 10 codes used in the Death Certificates, please visit the *Death Certificates. Technical Notes* web page (or http://www.doh.wa.gov/ehsphil/chs/chs-data/TechNote/tech_not.pdf).

Fetal Death Certificates: For more information about fetal death certificates, please visit the *Washington State Department Of Health - Fetal Death* webpage (or http://www.doh.wa.gov/ehsphil/chs/chs-data/fetdeath/fd_main.htm).

Healthy People 2010: Healthy People 2010 is a set of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats. Source for national health objectives for Year 2010, found at <http://www.healthypeople.gov/document/>.

Healthy Youth Survey 2002: The Healthy Youth Survey (HYS) is a collaborative effort of the Office of the Superintendent of Public Instruction, the Department of Health, the Department of Social and Health Service's Division of Alcohol and Substance Abuse, and the Office of Community Development. The Healthy Youth Survey provides important information about adolescents in Washington. County prevention coordinators, community mobilization coalitions, community public health and safety networks, and others use this information to guide policy and programs that serve youth. The information from the Healthy Youth Survey can be used to identify trends in the patterns of behavior over time. The state-level data can be used to compare Washington to other states that do similar surveys and to the nation. In the Fall of 2002, students in grades 6, 8, 10 and 12 answered questions about safety and violence, physical activity and diet, alcohol, tobacco and other drug use, and related risk and protective factors. The Healthy Youth Survey will next be administered in the Fall of 2004. State level data are available at: <http://www3.doh.wa.gov/HYS/>.

International Classification of Disease (ICD) Codes: ICD codes are used for the CHARS dataset and death certificate data. Starting in 1999, mortality data switched from using ICD-9 to using ICD-10 codes. In order to view trends in Death Certificate data, comparability ratios (available from the National Center for Health Statistics) are used. Morbidity data (CHARS datasets) currently use ICD-9 codes.

National Immunization Survey: This phone survey of adults with children ages 19 to 35 months is conducted by the National Center for Health Statistics. For more information, please visit the *NCHS - National Immunization Survey* website (or <http://www.cdc.gov/nis>).

National Vital Statistics Reports: Source for national birth and death data. See data at: <http://www.cdc.gov/nchs/products/pubs/pubd/nvsr/nvsr.htm>.

The Pregnancy Risk Assessment Monitoring System (PRAMS): The Pregnancy Risk Assessment Monitoring System survey is an ongoing, population-based surveillance system sponsored by the Centers for Disease Control and Prevention (CDC) and the Office of Maternal and Child Health. PRAMS is designed to generate state-specific data

Appendix A: Technical Notes

for assessing health status and health care before, during, and after a pregnancy and is administered 2-5 months postpartum. The information can be used for health and social services planning and policy development. DOH's PRAMS webpage is *Pregnancy Risk Assessment Monitoring system* (or <http://www.doh.wa.gov/cfh/PRAMS/default.htm>), and the CDC's PRAMS webpage is the *Pregnancy Risk Assessment Monitoring System* (or http://www.cdc.gov/reproductivehealth/srv_prams.htm).

VISTA: Vista is a menu-driven software package that facilitates analysis of population-based health data. For more information on VISTA software and its uses, please visit the Vista webpage (<http://www.doh.wa.gov/OS/Vista/HOMEPAGE.HTM>).

Washington State Smile Survey: The Washington State Smile Survey included a sample of infants and toddlers and a random sample of public elementary school 2nd and 3rd graders. The portion of the survey that addressed 1-2 year olds was a collaborative effort with the Statewide Lead Poisoning Prevalence Survey, with over-sampling for Hispanic children and children of farm workers. The sampling frame also included a convenience sample of 6 of the 10 Early Start programs along with a Head Start program in the same community. Included in the questionnaire was a short demographic profile of the family to enhance understanding regarding access to dental care, economic status (eligibility for free/reduced meal program), and language spoken at home. Each child participating in the survey received an oral screening exam to determine the child's caries experience, treatment need and urgency, dental sealants needs, and a saliva sample for measuring the level of *Streptococcus mutans*. The year 2000 Survey gathered data on more than 3,500 children, 2,699 of which were in the elementary school sample (40% response rate). Please click here for a copy of the [Smile Survey 2000 Report](#).

Washington State Comprehensive Hospital Abstract Reporting System (CHARS): This is a record of International Classification of Disease (ICD) diagnosis codes upon hospital discharge. ICD-9 codes are currently used for CHARS data, though there will be a shift to using ICD-10 codes in the future. For more information, visit the DOH website at: <http://www.doh.wa.gov/EHSPHL/hospdata/>.

Washington State Population Survey: The Washington State Population Survey is a sample household survey of Washington State's population, completed by the Washington State Office of Financial Management, and used to create Intra-census Population Estimates for Washington State. For more information, visit the [OFM Population, Economy and Research](#) webpage (or <http://www.ofm.wa.gov/sps/index.htm>).

Washington State Survey of Adolescent Health Behaviors 2000: This survey was conducted jointly by the Department of Social and Health Services, the Office of the Superintendent of Public Instruction, the Department of Community Trade and Economic Development, and the Department of Health tobacco program. The survey was administered during class time to public school students in grades 6, 8, 10 and 12. The sample was stratified by geographic region and school size, and within these cells, where possible, a school was selected from each of three community types: urban, suburban, and rural. All students in selected schools were invited to participate. The survey asked a variety of questions about alcohol, tobacco, and drug use and risk and protective factors. Data were analyzed using Software for the Statistical Analysis of Correlated Data (SUDAAN) because of the complex sampling design (clustered by schools).

Appendix A: Technical Notes

Washington State Vital Statistics System: The vital statistics system monitors births, deaths, marriages, divorces, and fetal deaths for Washington State. Please visit the *Washington State Department of Health - Center for Health Statistics* website (or <http://www.doh.wa.gov/EHSPHL/CHS/CHS-Data/main.htm>).

Washington State Youth Risk Behavior Survey (YRBS), 1999: The Washington State YRBS was based on the Centers for Disease Control and Prevention (CDC) survey instrument. The YRBS is intended to monitor adolescent health-risk behaviors that contribute to morbidity, mortality, and social problems among youth and adults in the United States. The Washington YRBS used a two-stage sampling design: schools were chosen using a probability-proportionate-to-size sampling of all public schools serving children grades 9-12 (which ensured that smaller schools had some chance of selection). Once schools were chosen, a random sample of classrooms was selected within participating schools. A sample of 4,022 adolescents in Washington State public schools participated in the YRBS 1999 survey. Alternative schools serving high-risk youth in the public school system were included. Based on four comparison items that were also administered to a census of eleventh graders in the state during achievement testing, results seemed to be representative of adolescents in public schools despite the low school participation rate (45%). For a full report, please go to *Washington State Youth Risk Behavior Survey: 1999*. The CDC's webpage is available at *Youth Risk Behavior Surveillance system (YRBSS)* (or <http://www.cdc.gov/nccdphp/dash/yrbs/index.htm>).

Other CDC-Based Surveys: To learn about other National Surveys and Data Collection Systems produced by the National Center for Health Statistics, please visit the *NCHS - Surveys and Data Collection Systems* webpage (or <http://www.cdc.gov/nchs/express.htm>).

Statistical Terms

Rates: For more information on interpreting rates, please go to the *Washington State Department of Health - Guidelines for developing rates for public health assessment* (or <http://www.doh.wa.gov/Data/guidelines/Rateguide.htm>) website.

Confidence Intervals: A confidence interval is a range of values that is normally used to describe the uncertainty around a point estimate of a quantity, for example, a mortality rate. Therefore confidence intervals are a measure of the variability in the data. Generally speaking, confidence intervals describe how much different the point estimate could have been if the underlying conditions stayed the same, but chance had led to a different set of data. Confidence intervals are calculated with a stated probability (say 95%), and we say that there is a 95% chance that the confidence interval covers the true value. Most 95% confidence intervals for the same reason that most statistical tests are done at the 0.05 level- in other words, only because it's conventional. It is completely arbitrary that we consider a result that would happen only 5 out of 100 times by chance as being statistically significant, while we consider one happening 6 out of 100 times as not being statistically significant. It is good to remember that the true population value is a constant, even though its value is unknown, but a confidence interval is a random quantity whose value depends on the random sample or data from which it is calculated.

Appendix A: Technical Notes

Therefore we describe a 95% (say) confidence interval as having a 95% probability of covering the true value, rather than saying that there is a 95% probability that the true value falls within the confidence interval. This information was taken from the *Washington State Department of Health - Assessment Guidelines* (or <http://www.doh.wa.gov/data/guidelines/ConfIntguide.htm>) website.

Medicaid Status: The source for the Medicaid designations used in PRAMS is the Washington State Department of Social and Health Services, First Steps Database. Medicaid women had either prenatal care or delivery paid by Medicaid. Medicaid women include those who are very low income and receive cash assistance (TANF) in addition to Medicaid (Grant Recipients) and those who receive Medicaid with no cash assistance (Other Medicaid).

Unintended pregnancy: This indicator is calculated from pregnancy indicators for Washington resident women (births and abortions) and the year 2000 estimated percentage of unintended births from the Washington State Pregnancy Risk Assessment Monitoring System (PRAMS).

Numerator: [%unintended from PRAMS data * (livebirths)] + abortions.

Denominator: livebirths + abortions.

In 2000, 38% (\pm 3%) of resident births were unintended, based on 1,565 PRAMS respondents, and a response rate of 81%. Birth, fetal death and abortion data are from the Washington State Center for Health Statistics 1999-2001.

Vital Statistics Definitions

For a complete list of vital statistics definitions, refer to *Washington State Department of Health-CHS* web page (or <http://www.doh.wa.gov/EHSPHL/CHS/CHS-Data/main.htm>). Technical notes are available for each of the data sources cited there.

Birth Weight: Weight of the fetus or infant at time of delivery (normally recorded in pounds and ounces).

Fetal Death: Death prior to the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy. The death is indicated by the fact that after such an expulsion or extraction the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. Reporting of fetal deaths to the state is required only when the gestational period is twenty weeks or more.

Infant Death: Death of a child under one year of age (0-364 days).

Live Birth: The complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy, which, after such expulsion or extraction, breathes, or show any other evidence of life such as beating of the heart,

Appendix A: Technical Notes

pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

Neonatal: Death of an infant within the first 27 days of life.

Perinatal Death: Fetal deaths of 20 or more weeks' gestation plus infant deaths of less than seven days. This is one of four definitions used by the National Center for Health Statistics. Caution should be used in comparing perinatal death rates across reports unless it is certain that the same definition has been used.

Postneonatal Death: Death of infant of 28-364 days of age.

Appendix A: Technical Notes

Acronyms Used in MCH Data Report

AIAN	American Indian/Alaska Native
BSE	Bovine spongiform encephalopathy
BRFSS	Behavioral Risk Factor Surveillance System
CAHPS	Consumer Assessment of Health Plans Survey
CDC	Centers for Disease Control
CDR	Child Death Review
CHARS	Comprehensive Hospital Abstract Reporting System
CHIF	Child Health Intake Form
CI	Confidence Interval
CMHC	Community and Migrant Health Center(s)
CPS	Current Population Survey
CSHCN	Children with Special Health Care Needs
DPT	Diphtheria, Pertussis, Tetanus
FPL	Federal Poverty Level
HP 2010	Healthy People 2010
HYS	Healthy Youth Survey
ICD-10	International Classification of Diseases - Version 10
ICD-9	International Classification of Diseases - Version 9
IMMENU	Immunization Menu software application
IMR	Infant Mortality Rate
LBW	Low Birth Weight (Less than 2500 grams)
LHJ	Local Health Jurisdiction
MAA	Medical Assistance Administration
MCH	Maternal and Child Health
MVI	Multi-Vitamins
NCHS	National Center for Health Statistics
NHOPI	Native Hawaiian, Other Pacific Islander
NIS	National Immunization Survey
NPM	National Performance Measure
OFM	Office of Financial Management
PRAMS	Pregnancy Risk Assessment Monitoring System
SCHIP	State Children's Health Insurance Program
SE	Standard Error
SIDS	Sudden Infant Death Syndrome
SLAITS	State and Local Area Integrated Telephone Survey
TANF	Temporary Assistance for Needy Families
UI	Unintentional Injury
VistaPHw	Statistical Software Package for Assessment
YRBS	Youth Risk Behavior Survey